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PTO/SB/81 (02-01)

Approved for use through 10/31/2002. OMB 0651-0035

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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## POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number	
Filing Date	
First Named Inventor	Martin J. Murphy
Title	Lightning Detection*
Group Art Unit	
Examiner Name	
Attorney Docket Number	6059.12004

I hereby appoint:

☐ Practitioners at Customer Number  →

Place Customer  
Number Bar Code  
Label here

☒ Practitioner(s) named below:

Name	Registration Number
William A. Birdwell	27,181
Antonio R. Durando	28,409
Garth E. Janke	40,662
Gavin J. Milczarek-Desai	45,801

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

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OR

☐ Practitioners at Customer Number  →

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☒ Firm or  
Individual Name

William A. Birdwell

Address Durando Birdwell & Janke, P.L.C.

Address 2929 E. Broadway Blvd.

City Tucson State AZ Zip 85716

Country USA

Telephone 520-881-9442 Fax 520-881-9448

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

### SIGNATURE of Applicant or Assignee of Record

Name Global Atmospherics, Inc. by its V.P. of R&D, Kenneth L. Cummins

Signature

Date

February 12, 2002

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of \_\_\_\_\_ forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

\*and Data Acquisition System

**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**

☒ Declaration Submitted with Initial Filing      OR      ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	6059.12004
First Named Inventor	Martin J. Murphy
<b>COMPLETE IF KNOWN</b>	
Application Number	/
Filing Date	
Art Unit	
Examiner Name	

As the below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original and first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**LIGHTNING DETECTION AND DATA ACQUISITION SYSTEM**

(Title of the Invention)

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number, [ ] and was amended on (MM/DD/YYYY) [ ] (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

## DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input type="checkbox"/> Customer Number or Bar Code Label		OR <input checked="" type="checkbox"/> Correspondence address below	
Name William A. Birdwell Durando Birdwell & Janke, P.L.C.			
Address 2929 E. Broadway Blvd.			
City Tucson	State AZ	ZIP 85716	
Country US	Telephone 520-881-9442	Fax 520-881-9448	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.			
NAME OF SOLE OR FIRST INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any]) Martin J.		Family Name or Surname Murphy	
Inventor's Signature <i>Martin J. Murphy</i>		Date <i>2-12-02</i>	
Residence: City Tucson	State AZ	Country USA	Citizenship USA
Mailing Address 2705 E. Medina Road			
City Tucson	State AZ	ZIP 85706	Country USA
NAME OF SECOND INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any]) Kenneth L.		Family Name or Surname Cummins	
Inventor's Signature <i>Kenneth L. Cummins</i>		Date <i>2/12/02</i>	
Residence: City Tucson	State AZ	Country USA	Citizenship USA
Mailing Address 2705 E. Medina Road			
City Tucson	State AZ	ZIP 85706	Country USA
<input checked="" type="checkbox"/> Additional inventors are being named on the <u>1</u> supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.			

Please type a plus sign (+) inside this box → +

PTO/SB/02A (11-00)

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## DECLARATION

**ADDITIONAL INVENTOR(S)**  
Supplemental Sheet  
Page 3 of 3

<b>Name of Additional Joint Inventor, If any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Albert E.		Pifer	
Inventor's Signature <i>Albert E. Pifer</i>		Date <i>2-12-02</i>	
Residence: City Tucson	State AZ	Country USA	Citizenship USA
Mailing Address 2705 E. Medina Road			
Mailing Address			
City Tucson	State AZ	ZIP 85706	Country USA
<b>Name of Additional Joint Inventor, If any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	ZIP	Country
<b>Name of Additional Joint Inventor, If any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	ZIP	Country

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**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Martin J. Murphy, Kenneth L. Cummins and Alburt E. Pifer

Application No./Patent No.: \_\_\_\_\_ Filed/Issue Date: \_\_\_\_\_

Entitled: Lightning Detection and Data Acquisition SystemGlobal Atmospherics, Inc. , a corporation of Arizona

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %

In the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

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☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

February 12, 2002  
Date

Kenneth L. Cummins

Typed or printed name



Vice President  
Research and Development

Title